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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,478

04/20/2006

Hideki Ito

13241/15

5422

23838 7590 05/08/2008

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EXAMINER

NELSON, MICHAEL B

ART UNIT

PAPER NUMBER

4145

MAIL DATE

DELIVERY MODE

05/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,478	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> MICHAEL B. NELSON	<b>Art Unit</b> 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/20/06</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Specification***

1. The use of the trademarks has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-3, the phrase "the sample" is recited. This phrase is vague and indefinite in that it is unclear which sample is being prepared according to which method. For the purposes of advancing prosecution, the phrase in question will be taken as referring to the sample which is recited in the same requirement.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. 6,458,437), and in view of Arakawa et al. (U.S. 2003/0071794).

Regarding claim 1, Ito et al. discloses a heat-shrinkable polyester film.

Ito et al. does not explicitly disclose the specific instant requirements (A), (B), and (C) of the heat-shrinkable polyester film. However, in light of the substantially identical heat shrinkability in the TD and MD directions at 70°C and 85°C and the substantially identical polyester film composition (Table 1 and 2, C9-C10) with the instant heat shrinkability in the TD

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and MD directions at 70°C and 85°C and polyester film composition (See instant specification, pages 75-83), it will, inherently, possess the claimed properties (i.e. requirements (A), (B) and (C)), absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).

Ito et al. does not disclose that the heat-shrinkable polyester film satisfies the following requirements (D) to (E):

- (D) a three-dimensional surface roughness  $S\Delta a$  is 0.008 to 0.04;
- (E) a three-dimensional surface roughness  $SR_z$  is 0.6 to 1.5 micrometers.

Arakawa et al. discloses a polyester film with a three-dimensional surface roughness  $SR_z$  is 0.6 to 1.5 micrometers.

(See [0021], the surface roughness is disclosed as being between 0.35 and 1.5 micrometers which completely overlaps the claimed range. The surface roughness is disclosed as being chosen to improve slipperiness. Also see, [0078]-[0079], polyesters are disclosed as the film materials.)

Regarding the overlapping surface roughness ranges, it would have been obvious to one of ordinary skill in the art at the time of invention to have selected the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness. In re Malagari, 182 USPQ 549.

Arakawa et al. does not explicitly disclose the specific three-dimensional surface roughness  $S\Delta a$  of 0.008 to 0.04, however, Arakawa et al. discloses a film which is meant to be optimized in terms of slipperiness by changing the surface roughness characteristics of the film.

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As the slipperiness of the film is a variable that can be modified, among others, by adjusting the specific three-dimensional surface roughness  $S\Delta a$ , the specific three-dimensional surface roughness  $S\Delta a$  would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made.

As such, without showing unexpected results, the claimed specific three-dimensional surface roughness  $S\Delta a$  of 0.008 to 0.04 cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the specific three-dimensional surface roughness  $S\Delta a$  to obtain the desired slipperiness of the film (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).)

The inventions of both Ito et al. and Arakawa et al. are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the surface roughness of the film of Ito et al. by including a surface roughness as taught by Arakawa et al. for the purposes of imparting improved slipperiness.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. 6,458,437), and in view of Boseki (JP-2002-331581), see machine translation.

Regarding claim 2, Ito et al. discloses a heat-shrinkable polyester film.

Ito et al. does not explicitly disclose the specific instant requirements (A), (B), and (C) of the heat-shrinkable polyester film. However, in light of the substantially identical heat shrinkability in the TD and MD directions at 70°C and 85°C and the substantially identical polyester film composition (Table 1 and 2, C9-C10) with the instant heat shrinkability in the TD and MD directions at 70°C and 85°C and polyester film composition (See instant specification, pages 75-83), it will, inherently, possess the claimed properties (i.e. requirements (A), (B) and (C)), absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).

Ito et al. does not disclose that the heat-shrinkable polyester film satisfies the following requirements (F) to (G):

- (F) a light transmission at a wavelength of 380 nm is not more than 20%, and a light transmission at a wavelength of 400 nm is not more than 60%;
- (G) a Haze value is not more than 15%.

Boseki discloses a polyester film wherein:

- (F) a light transmission at a wavelength of 380 nm is not more than 20%, and a light transmission at a wavelength of 400 nm is not more than 60%;
- (G) a Haze value is not more than 15%.

(See Claim 1, hayes is assumed to be a mistranslation of haze. The disclosed numerical ranges exactly match the instant claimed ranges. The invention relates to reducing the UV light penetration of heat shrinkable polyester films for use as labels.)

The inventions of both Ito et al. and Boseki are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the light transmittance and haze of the film of Ito et al. by absorbing light in the visible light range as taught by Masuda for the purpose of reducing the UV light penetration of heat shrinkable polyester films.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. 6,458,437), and in view of Hayakawa et al. (WO 02/087853), see English language equivalent (U.S. 2003/0165658).

Regarding claim 3, Ito et al. discloses a heat-shrinkable polyester film.

Ito et al. does not explicitly disclose the specific instant heat shrinkability requirements (a), (b), and (c) of the heat-shrinkable polyester film. However, in light of the substantially identical heat shrinkability in the TD and MD directions at 70°C and 85°C and the substantially identical polyester film composition (Table 1 and 2, C9-C10) with the instant heat shrinkability in the TD and MD directions at 70°C and 85°C and polyester film composition (See instant specification, pages 75-83), it will, inherently, possess the claimed heat shrinkability properties (i.e. requirements (A), (B) and (C) from instant claims 1 and 2, without the film roll and sample location limitations), absent any objective evidence to the contrary. See MPEP 2112 (In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).



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Ito et al. does not disclose that film be put on a roll having a length of 1000 to 6000 m or that the samples are obtained in a following manner: an initiation end of winding of a film of steady region giving stable film properties in a longitudinal direction is defined as a first end, and a termination end of winding thereof is defined as a second end; a first cut-off point of the samples of the film is provided less than 2 m inside of the second end, and a final cut-off point is provided less than 2 m inside the first end; a plurality of sample cut-off points are provided at an interval of about 100 m from the first cut-off point,

Hayakawa et al. discloses a film roll of having a length of 1000 to 6000 m and wherein the samples are obtained in a following manner: an initiation end of winding of a film of steady region giving stable film properties in a longitudinal direction is defined as a first end, and a termination end of winding thereof is defined as a second end; a first cut-off point of the samples of the film is provided less than 2 m inside of the second end, and a final cut-off point is provided less than 2 m inside the first end; a plurality of sample cut-off points are provided at an interval of about 100 m from the first cut-off point.

(See [0132], the film roll is 1000m in length which falls within the instant claimed range. Also see [0187], claim 1, the location of samples on the film roll reads on the instant limitations for sample selection. The sample locations are disclosed as being chosen to ensure consistency in the film roll through out its length [0009]-[0012].)

The inventions of both Ito et al. and Hayakawa et al. are drawn to the field of polyester films and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the film roll length and sample locations of Ito et al. by using

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the length and sample locations of Hayakawa et al. for the purposes of imparting increased property consistency through the film length.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,279,204 (Serial 10/512,412) in view of Arakawa et al. (U.S. 2003/0071794).

The requirements A-C of instant claim 1 and the disclosed claim 1 are not patentably distinct. The only difference being that the disclosed upper limit of requirement (B) is not less than 70% heat shrinkage, which completely overlaps the instant claimed range of greater than 75%. For requirements D and E, Arakawa et al. discloses the surface roughness of a polyester

film as being between 0.35 and 1.5 micrometers which completely overlaps the instant claimed range. The surface roughness is disclosed as being chosen to improve slipperiness ([0021]).

Arakawa et al. does not explicitly disclose the specific three-dimensional surface roughness  $S\Delta a$  of 0.008 to 0.04, however, Arakawa et al. discloses a film which is meant to be optimized in terms of slipperiness by changing the surface roughness characteristics of the film and therefore the surface roughness  $S\Delta a$  would have been treated as a result effective variable.

11. Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No.7,279,204 (Serial 10/512,412), in view of Boseki (JP-2002-331581), see machine translation.

The requirements A-C of instant claim 2 and the disclosed claim 1 are not patentably distinct. The only difference being that the disclosed upper limit of requirement (B) is not less than 70% heat shrinkage, which completely overlaps the instant claimed range of greater than 75%. For requirements F and G, Boseki discloses in claim 1, identical limitations on a polyester film for the purposes of reducing UV light transmission.

12. Claim 3 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No.7,279,204 (Serial 10/512,412), in view of Hayakawa et al. (WO 02/087853), see English language equivalent (U.S. 2003/0165658).

The requirements a-c of instant claim 3, without the sample location limitations, and the disclosed requirements (A)-(C) of claim 1 are not patentably distinct. The only difference being that the disclosed upper limit of requirement (B) is not less than 70% heat shrinkage, which

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completely overlaps the instant claimed range of greater than 75%. For the film role sample location limitations, Hayakawa et al. discloses the same limitations in claim 1. The film role length would have been considered a result effective variable by those having ordinary skill at the time of the invention.

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571)270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gwendolyn Blackwell/  
Primary Examiner, Art Unit 1794

/MN/  
04/14/08